

CLAIMS

1
2 1. (Currently Amended) A method of synchronizing activation of
3 scheduled update data among a plurality of web servers, wherein each of the
4 plurality of web servers is coupled to a common data server, the method
5 comprising:

6 receiving a scheduled activation time from the data server;

7 comparing a time associated with a clock in each web server to a time
8 associated with a clock in the data server;

9 adjusting the scheduled activation time on each web server by the time
10 difference between the clock in the web server and the clock in the data server;

11 prior to the scheduled activation time, receiving the scheduled update data
12 into staging caches in the plurality of web servers; and

13 at the scheduled activation time, activating the scheduled update data by
14 causing the scheduled update data from the staging caches within each of the
15 plurality of web servers to be accessible from an active cache within each of the
16 plurality of web servers.

17
18 2. (Canceled.)

19
20 3. (Original) A method as recited in claim 1 wherein each web
21 server contains a clock, and wherein the clocks in the plurality of web servers are
22 not synchronized with one another.

1 4. (Previously Presented) A method as recited in claim 1 wherein
2 the causing the scheduled update data to be accessible from the active cache
3 comprises swapping an active data cache pointer with a staged data cache pointer.
4

5 5. (Original) A method as recited in claim 1 wherein no
6 communications are required between the individual web servers to synchronize
7 their data.
8

9 6. (Previously Presented) A method as recited in claim 1 wherein
10 retrieving scheduled update data into staging caches in the plurality of web servers
11 is performed asynchronously.
12

13 7. (Original) A method as recited in claim 1 further comprising:
14 after the scheduled activation time, updating data caches in the data server.
15

16 8. (Original) A method as recited in claim 1 further comprising:
17 after the scheduled activation time, calculating a next scheduled activation
18 time.
19

20 9. (Original) A method as recited in claim 1 further comprising:
21 after the scheduled activation time, updating data caches in the data server
22 and calculating a next scheduled activation time, wherein the updating and
23 calculating are performed by the first web server to initiate a retrieval process after
24 the scheduled activation time.
25

1 10. (Previously Presented) A method as recited in claim 1 further
2 comprising:

3 if an additional web server is coupled to the data server, then causing the
4 scheduled update data to be accessible from the active cache in the data server to
5 an active cache in the additional web server.

6
7 11. (Previously Presented) A method as recited in claim 1 further
8 comprising:

9 if one of the plurality of web servers is initialized, then causing the
10 scheduled update data to be accessible from the active cache in the data server to
11 the active cache in the initialized web server.

12
13 12. (Original) A method as recited in claim 1 wherein the plurality of
14 web servers comprise a web farm.

15
16 13. (Original) A method as recited in claim 1 wherein the plurality of
17 web servers comprise a web farm, and wherein the plurality of web servers are
18 load balanced using a domain name service (DNS) round-robin technique.

19
20 14. (Original) One or more computer-readable memories containing
21 a computer program that is executable by a processor to perform the method
22 recited in claim 1.

1 15. (Currently Amended) A system comprising:
2 a plurality of web servers coupled to a common data server, wherein each
3 of the plurality of web servers comprises:

4 a staging cache;

5 an active data cache coupled to the staging cache; and

6 a clock having an associated time,

7 wherein the web server is configured to retrieve receive a scheduled
8 activation time from the data server, and further configured to receive scheduled
9 update data from the data server into the staging cache prior to the scheduled
10 activation time;

11 wherein each web server is configured to compare the time associated with
12 the clock in the web server to a time associated with a clock in the data server; and

13 wherein the web server is configured to cause the scheduled update data
14 from the staging cache to be accessible from the active data cache at the scheduled
15 activation time.

16
17 16. (Canceled.)

18
19 17. (Currently Amended) A system as recited in claim 15 ~~claim 16~~
20 wherein each web server is further configured to adjust the scheduled activation
21 time on the web server by the time difference between the clock in the web server
22 and the clock in the data server.

1 18. (Original) A system as recited in claim 15 wherein each web
2 server contains a clock, and wherein the clocks in the plurality of web servers are
3 not synchronized with one another.

4
5 19. (Original) A system as recited in claim 15 wherein the web server
6 is further configured to swap an active data cache pointer with a staged data cache
7 pointer.

8
9 20. (Original) A system as recited in claim 15 wherein each of the
10 plurality of web servers is configured to update data caches in the data server after
11 the scheduled activation time.

12
13 21. (Original) A system as recited in claim 15 wherein each of the
14 plurality of web servers is configured to calculate a next scheduled activation time
15 after the scheduled activation time.

16
17 22. (Original) A system as recited in claim 15 wherein the plurality
18 of web servers comprise a web farm.
19
20
21
22
23
24
25

1 23. (Currently Amended) One or more computer-readable media
2 having stored thereon a computer program that when executed performs a method
3 comprising the following steps:

4 retrieving receiving a scheduled activation time from a data server;
5 prior to the scheduled activation time, receiving scheduled update data into
6 a staging cache in a server;

7 comparing a time associated with a clock in each server to a time associated
8 with a clock in the data server;

9 adjusting the scheduled activation time on each server by the time
10 difference between the clock in the server and the clock in the data server;

11 at the scheduled activation time, causing scheduled update data from the
12 staging cache in the server to be accessible from an active cache in the server; and

13 after the scheduled activation time, updating data caches in the data server
14 and calculating a next scheduled activation time.

15
16 24. (Canceled.)

17
18 25. (Original) One or more computer-readable media as recited in
19 claim 23 wherein each server contains a clock, and wherein the clocks in the
20 plurality of servers are not synchronized with one another.

1 26. (Original) One or more computer-readable media as recited in
2 claim 23 wherein updating data caches in the data server and calculating the next
3 scheduled activation time are performed if another process has not yet updated the
4 data caches or calculated the next scheduled activation time during a current data
5 synchronization cycle.

6
7 27. (Previously Presented) One or more computer-readable media as
8 recited in claim 23 further comprising:

9 if the server is initialized, then causing the scheduled update data to be
10 accessible from the active cache in the data server to the active cache in the
11 initialized server.

12
13 28. (Previously Presented) One or more computer-readable media as
14 recited in claim 23 wherein the causing the scheduled update data to be accessible
15 from the active cache comprises swapping an active data cache pointer with a
16 staged data cache pointer.

1 29. (Currently Amended) A method of synchronizing activation of
2 scheduled update data among a plurality of web servers, wherein each of the
3 plurality of web servers is coupled to a common data server, the method
4 comprising:

5 providing a scheduled activation time from the data server to each of the
6 plurality of web servers;

7 communicating the scheduled update data into a staging cache in each of
8 the plurality of web servers prior to the scheduled activation time;

9 comparing a time recognized by each web server to a current time
10 recognized by the data server;

11 adjusting the scheduled activation time on each web server by the time
12 difference between the time recognized by the web server and the current time
13 recognized by the data server; and

14 causing the scheduled update data from the staging cache in each of the
15 plurality of the web servers to be accessible from an active cache in each of the
16 plurality of the web servers at the scheduled activation time.

17
18 30. (Previously Presented) A method as recited in claim 29 wherein
19 the communicating scheduled update data into a staging cache is performed
20 asynchronously.

21
22 31. (Previously Presented) A method as recited in claim 29 wherein
23 the causing the scheduled update data to be accessible from the active cache
24 comprises swapping an active data cache pointer with a staged data cache pointer.
25

1 32. (Original) A method as recited in claim 29 wherein no
2 communication is required between the web servers to synchronize their data.

3
4 33. (Original) One or more computer-readable memories containing
5 a computer program that is executable by a processor to perform the method
6 recited in claim 29.

7
8 34. (Canceled.)

9
10 35. (Canceled.)
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25